JOURNAL

OF THE

SCIENTIFIC LABORATORIES

OF

DENISON UNIVERSITY

TABLE OF CONTENTS

VOLUME 46

1963-1965

Vol. 46, Art. 1-3 W. A. Everhart, Editor

Vol. 46, Art. 4-13 Robert R. Haubrich, Chairman, Editorial Board
Irvin S. Wolf, Managing Editor

GRANVILLE, OHIO

ARTICLES

BRENNER, FRED J. Growth, Fat Deposition and Development of Endothermy in Nestling Red-winged Blackbirds..... 81

BRENNER, FRED J. The Influence of Testosterone on the Pattern of Fat Deposition in Birds.....131

CUMMING, WILLIAM W. See MALOTT, RICHARD W..... 91

DEAN, RICHARD A. Principles of Uncertainty..... 1

DONALDSON, JOHN F. A Physiological Study of the Origin of Life..... 9

GAUNDER, ROBERT G. and HOFFMAN, WILLIAM A., JR. The Reaction of Cobalt and 2,3-butanedione-2-oxime.....125

HOFFMAN, WILLIAM A., JR. See GAUNDER, ROBERT G.....125

MALOTT, RICHARD W. and CUMMING, WILLIAM W. The Differential Punishment of Interresponse Times..... 91

SHAPLEY, HARLOW. The Ten Revelations.....119

SMILEY, ELLEN. Pitch Recognition.....137

WILLIAMS, FRANCIS T., JR. A Mechanism for the Reactions of Nitrocyclopropyl Ketones with Bases..... 73

ABSTRACTS OF HONORS PAPERS

By Members of Graduating Classes, Denison University

Class of 1963.....87

Craig A. Allen, Hershel Walter Amburn II, Jane Baldwin, Carol Linda Brewster, Helen Craighill Brown, Ann W. Bryan, Clay Warwick Clement, Carolyn Wink Colley, Carolyn Tallman Condon, Robert Cooper Condon, Kay Cushman, Geoffrey Robert Darrow, Michael R. Deddish, Jr., John Henry Dudley, Jr., Sarah K. Ensley, Cynthia Grant, Loring R. Helfrich, Ruth Regina Hunter, Ellen Elizabeth Hussong, Judith May Jones, Diane Ella Liebner, Elise Linder, Susan Lindsay, John S. Lowe, Gail Reeder Meyer, Beth Ann Miller, David Phillips Millett, Janet Elizabeth Old, Pamela Porterfield, Bruce Allen Powell, Susan Cornelia Reynolds, Carole Anne Rigsby, Peter Henry Ruger, Iris E. Sebastian, Diane Loretta Sekura, Helen N. Shadduck, William Irwin Shorrock, Richard Henry Stillman III, Janet Allen Tallman, Ellen Thompson, William Herbert Wilken, Katherine Ann Winget, David Alan Wise, Elizabeth Ann Young.

Class of 1964

DIVISION OF NATURAL SCIENCES.....95

Ronald Holtman, Beverly Wells, David Albin Benson, Robert G. Gaunder,, Hugh Hunter Handsfield, Robert L. Jeanne, John A. Krebs, Charles J. Larson, David Albert Neidhart, Stanley Clinton Collyer, Joy Crawford, Julia Daugherty Cusack.

DIVISION OF SOCIAL SCIENCES.....102

George John Arbeiter, Gordon Forbes Boals, Scott Nickerson Whitlock, Robert Kenneth Keim, Richard Dale Schuessler, Carleton Shaw Jones, Joyce Ellen Leader, Thomas Paul Mehnert, James Harvey Meyer, Jane Seymour Trexler, William Duncan Whitney.

DIVISION OF HUMANITIES.....110

John Marshall Barrett, Judith Lynne Corwin, Sarah Eisinger, Fredrica Cornell Harris, Bruce Jorden Levinsky, James H. Overfield, Kay Beth Bartoletti, Mary R. Worman, Bonita E. Kersker, Sarah Ann Conway, Kathleen Doris Doane, Jane Shumaker Glennie.

DIVISION OF ARTS.....118

Leslie Helen Irish

Class of 1965

DIVISION OF NATURAL SCIENCES.....145

Kathleen Ann Schwarz, Charles I. Burch, Jr., James S. Ogsbury, Marilyn Jane Preis, Sally Louise Deibel, David F. Drake, Joseph R. Griswold, Nancy Ann Katzen, Daniel A. LaFerriere, Mark M. Popil John Corcoran, Jr., Patricia King, Ellen Elizabeth Smiley.

DIVISION OF SOCIAL SCIENCES.....152

Richard F. Carson, Michele Holland, Marcia L. Jaquith, Richard Coleman Schomaker, Claire Diane Fry, Clifford Todd.

DIVISION OF HUMANITIES.....157

Kirk Dallas Wilson, Robert Worth Stocker II, Mary Louise Chamberlain, Barbara E. Reisner, Nancy Lynn Acra, Robert Stephens Hoyt, Jr., Curt Matthews, Katherine Messamer, B. Allan Baker, Sherman N. Hinson, Jean Elinor Kernahan, John A. Klein, Carolyn Ann Krager, Robert A. Maxwell, Margaret Padelford, Stanley Miller, J. Tullis Rogers, Katherine Treat, Robert Vale Wells.

DIVISION OF ARTS.....171

John David Arnn.